

Amendments to the Claims:

Please cancel Claims 19 – 30 as submitted in Applicants' Response filed September 22, 2005 and add the following new claims.

Claims 1 – 18 were cancelled in the September 22, 2005 Response.

The listing of Claims below replaces all prior versions, and listings, of Claims in the Application.

Listing of Claims:

Claims 1 – 18 (previously cancelled).

Claims 19 – 30 (cancelled).

31. (new) A method of making a circuitized substrate, said method comprising:

providing a polytetrafluoroethylene dielectric layer;

immersing said polytetrafluoroethylene dielectric layer in a solution including a conductive monomer and a seed material for a predetermined time period;

removing said polytetrafluoroethylene dielectric layer from said solution including said conductive monomer and said seed material and thereafter rinsing and drying said polytetrafluoroethylene dielectric layer; and

thereafter electrolessly plating a plurality of copper circuit lines on said polytetrafluoroethylene dielectric layer, each of said copper circuit lines having a peel strength within the range of from about 2.3 to about 3.5 pounds per square inch.

32. (new) The method of claim 31 wherein said conductive monomer in said solution is selected from the group of monomers consisting of pyrrole monomer, aniline monomer, thiophene monomer and combinations thereof.
33. (new) The method of claim 31 wherein said seed material is palladium-tin, said monomer comprising from about 0.001 to about 0.100 percent of said solution.
34. (new) The method of claim 33 wherein said monomer comprises about 0.05 percent of said solution.
35. (new) The method of claim 32 wherein said solution further includes an oxidant.
36. (new) The method of claim 35 wherein said oxidant is selected from the group consisting of sodium persulfate, ferric chloride, cupric chloride, permanganate salt and compositions thereof.
37. (new) The method of claim 31 wherein said solution including said conductive monomer and said seed material is at a temperature of from about 20 degrees Celsius to about 30 degrees Celsius during said immersing of said dielectric polymer layer therein.
38. (new) The method of claim 31 further comprising making at least one additional circuitized substrate using the steps of claim 31 and thereafter bonding said at least one additional circuitized substrate to said circuitized substrate.
39. (new) The invention of claim 31 wherein said method is performed without a sputtering operation.
40. (new) A method of making a circuitized substrate, said method comprising:
- providing a polytetrafluoroethylene dielectric layer;

immersing said polytetrafluoroethylene dielectric layer in a solution including a pyrrole conductive monomer and a palladium-tin seed material for a predetermined time period;

removing said polytetrafluoroethylene dielectric layer from said solution including said pyrrole conductive monomer and said palladium-tin seed material and thereafter rinsing and drying said polytetrafluoroethylene dielectric layer; and

thereafter electrolessly plating a plurality of copper circuit lines on said polytetrafluoroethylene dielectric layer, each of said copper circuit lines having a thickness of about 0.001 inch and a peel strength within the range of from about 2.3 to about 3.5 pounds per square inch.

41. (new) The method of claim 40 further comprising making at least one additional circuitized substrate using the steps of claim 31 and thereafter bonding said at least one additional circuitized substrate to said circuitized substrate.

42. (new) The invention of claim 40 wherein said method is performed without a sputtering operation.